



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,521	01/16/2001	Thomas Wiebke	2001_0032A	2128

513 7590 08/06/2003

WENDEROTH, LIND & PONACK, L.L.P.
2033 K STREET N. W.
SUITE 800
WASHINGTON, DC 20006-1021

EXAMINER

PEZZLO, JOHN

ART UNIT	PAPER NUMBER
----------	--------------

2662

DATE MAILED: 08/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/759,521

Applicant(s)
Wiebke et al.

Examiner
John Pezzlo

Art Unit
2662



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 Jan 2001
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3 6) ☐ Other:

Art Unit: 2662

DETAILED ACTION

The USPTO is participating in a search exchange pilot program with the European Patent Office (EPO). As part of the pilot program, the USPTO has received a copy of the Search Report prepared by the EPO on the counterpart EP application for which priority under 35 U.S.C. 119(a) is claimed. The references cited in the EPO Search Report have been considered by the examiner and have been listed on the PTO-892 form. A copy of these references is not being furnished to applicant with this Office action. It will not be necessary for applicant to submit these references in an information disclosure statement.

Claim Objections

1. Claims 11 and 12 are objected to because of the following informalities: Line 2, states “and/of” which is improper.
2. Claim 12 is objected to because of the following informalities: Line 3, states “the information bit rate” which lacks antecedent basis.
3. Claims 15 and 27 are objected to because of the following informalities: Line 3, states “FEC code rate” which lacks antecedent basis.
4. Claims 29 and 40 are objected to because of the following informalities: Each claim states “transmitter” which lacks antecedent basis.

Art Unit: 2662

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

I. Claims 1-12, 17-24, 30-32, and 34-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Ovesjo et al. (US 6,108,369) hereinafter Ovesjo.

1. Regarding claims 1 and 17 - Ovesjo discloses transmitting signals in a CDMA cellular radio transmission system, refer to column 1 lines 9 to 30.

Ovesjo discloses modulating a source signal with a channelization code having a length corresponding to a spreading factor to form a signal intended for transmission over the radio link,

Art Unit: 2662

refer to Figure 1A and column 1 lines 46 to 67 and column 2 lines 5 to 16 and column 2 lines 39 to 56 and column 4 lines 39 to 67 and column 5 lines 1 to 15.

Ovesjo discloses adapting the spreading factor for use in said modulation step, refer to Figures 2-4 and column 5 lines 15 to 67 and column 6 lines 1 to 52.

2. Regarding claims 2 and 18 - Ovesjo discloses determining the availability of channelization codes in the system, refer to Figures 3 and 4 and column 3 lines 2 to 34 and column 5 lines 45 to 67 and column 6 lines 1 to 52.

Ovesjo discloses adapting the spreading factor on the basis of the determined availability of the channelization codes, refer to Figures 3 and 4 and column 3 lines 2 to 34 and column 5 lines 45 to 67 and column 6 lines 1 to 52.

3. Regarding claims 3 and 19 and 30 - Ovesjo discloses signaling the adapted spreading factor over the radio link, refer to column 3 lines 60 to 67 and column 4 lines 1 to 30.

4. Regarding claims 4 and 21 and 31 and 35 - Ovesjo discloses encoding the source signal prior to modulation with a forward error correction (FEC) and adapting the FEC code rate, refer to column 2 lines 29 to 56.

Art Unit: 2662

5. Regarding claims 5 and 22 and 36 - Ovesjo discloses that the FEC code rate is adapted in accordance with the determined availability of the channelization codes or the adapted spreading factor, refer to Figures 3 and 4 and column 2 lines 29 to 56 and column 3 lines 2 to 34 and column 5 lines 45 to 67 and column 6 lines 1 to 52.

6. Regarding claims 6 and 32 - Ovesjo discloses signaling the FEC code rate over the radio link, refer to column 3 lines 60 to 67 and column 4 lines 1 to 30 and column 5 lines 15 to 44.

7. Regarding claims 7 and 23 and 37 - Ovesjo discloses Ovesjo discloses that the spreading factor or code rate is carried out in accordance with a measurement of a parameter of channel quality, interference, system capacity, transmit power or link quality, refer to Figure 3 and column 3 lines 17 to 34 and column 4 lines 41 to 67 and column 5 lines 45 to 67 and column 6 lines 1 to 5.

8. Regarding claim 8 - Ovesjo discloses that the measurement is reported from the receiver to a transmitter on request or periodically, refer to Figure 1A and column 3 lines 60 to 67 and column 4 lines 1 to 40 and claim 9.

Art Unit: 2662

9. Regarding claim 9 - Ovesjo discloses that the adaptation step for the spreading factor or FEC code rate is carried out on an individual basis for at least one user of the system, refer to Figure 1A and column 2 lines 40 to 55 and column 4 lines 30 to 40.

10. Regarding claim 10 - Ovesjo discloses that the adaptation step for the spreading factor or FEC code rate is carried out on the basis of a comparison of an estimated system parameter value calculated for the current code rate or spreading factor with a predicted system parameter value calculated for the code rate or spreading factor after a potential change, refer to Figure 1A and column 4 lines 40 to 67 and column 5 lines 1 to 15.

11. Regarding claim 11 - Ovesjo discloses that the adaption for the spreading factor or FEC code rate is carried out in accordance with an adaption of an information bit rate of the source signal, refer to column 1 lines 47 to 67 and column 2 lines 5 to 55 and column 3 lines 60 to 67 and column 4 lines 1 to 30.

12. Regarding claim 12 - Ovesjo discloses that the adaptation step for the spreading factor or FEC code rate is carried out in accordance with a properties of a retransmission algorithm, refer to Figure 1A and column 3 lines 60 to 67 and column 4 lines 1 to 40 and claim 9.

Art Unit: 2662

13. Regarding claims 20 and 34 - Ovesjo discloses a multiplexer for inserting a transport format indicator into the signal to be transmitted, refer to column 3 lines 60 to 67 and column 4 lines 1 to 20.

14. Regarding claims 24 and 38 - Ovesjo discloses that the transmitter is embodied as a base station, refer to Figure 1A and column 4 lines 30 to 65 and column 5 lines 1 to 15.

II. Claims 13-16, 25-29, 33, 39, and 40 are rejected under 35 U.S.C. 102(e) as being anticipated by Dahlman et al. (US 6,222,875 B1) hereinafter Dahlman.

1. Regarding claims 13 and 25 - Dahlman discloses receiving a modulated signal transmitted over a radio link, refer to Figure 2 and column 4 lines 50 to 67 and column 5 lines 1 to 30.

Dahlman discloses determining the spreading factor used in an adaptive manner for modulating the received signal, refer to Figure 1 and column 4 lines 8 to 49.

Dahlman discloses demodulating the received signals using the determined spreading factor with a channelization code having a length corresponding to the spreading factor, refer to Figures 1, 3, 4 and 5 and column 4 lines 8 to 50 and column 5 lines 25 to 67 and column 6 lines 1 to 25.

Art Unit: 2662

2. Regarding claims 14 and 26 - Dahlman discloses determining the FEC code rate used for encoding the received signals, refer to column 2 lines 15 to 50.
3. Regarding claims 15 and 27 and 33 and 39 - Dahlman discloses that the determination step includes receiving a transport format indicator indicating the spreading factor or the FEC code rate, refer to Figures 1 and 4 and column 2 lines 25 to 67 and column 3 lines 1 to 3.
4. Regarding claims 16 and 28 - Dahlman discloses that the determination step includes demodulating the transport format indicator in advance and for each frame of received signals, refer to Figures 1 and 4 and column 2 lines 25 to 67 and column 3 lines 1 to 3 and column 5 lines 30 to 67 and column 6 lines 1 to 25.
5. Regarding claims 29 and 40 - Dahlman discloses that the receiver is embodied as a mobile station, refer to Figure 1 and column 4 lines 8 to 35.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2662

1. Kokko et al. (US 5,790,534) discloses a load control method and apparatus for CDMA cellular system having circuit and packet switched terminals.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Pezzlo whose telephone number is (703) 306-5420. The examiner can normally be reached on Monday to Friday from 8:30 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on (703) 305-4744. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-6743.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 872-9314.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C.

or faxed to:

(703) 872-9314

For informal or draft communications, please label "PROPOSED" or "DRAFT"

Hand delivered responses should be brought to:

Receptionist (Sixth floor)

Crystal Park 2

Application/Control Number: 09/759,521

Page 10

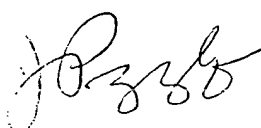
Art Unit: 2662

2121 Crystal Drive

Arlington, VA.

John Pezzlo

5 August 2003


JOHN PEZZLO
PRIMARY EXAMINER